Application Serial No. 10/521,539

Attorney Docket No. QT-5055

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

1. (Currently Amended): A spring—buffer for an elevator system, the buffer comprising:

a conical coil spring,

wherein the said-buffer is configured to be disposed at one end of a hoistway of the elevator system for contacting a vertically moving member of said elevator system in the event of an abnormal overrun, eharacterized in that

wherein the said spring buffer includes a conical coil spring includes having a spiral coil element that comprises a series of coils.

wherein a radius decreasing with increasing axial displacement of the spiral coil element decreases along an axis of the conical coil spring such that if the spiral coil spring is fully compressed, the coils of the spiral coil spring are configured to be arranged in a substantially planar configuration, and

wherein a thickness of the coil element is substantially uniform between an outermost coil and an innermost coil.

- 2. (Currently Amended): The A-spring buffer as recited in claim 1,—further characterized in that said conical coil spring comprises a series of coils, wherein an outer-the outer radius of a the next sequential coil is less than an inner the inner radius of an adjacent the preceding coil, thereby permitting said coils to be compressed axially without experiencing radial interference.
- 3. (Currently Amended): The spring-buffer as recited in claim 2, wherein a further characterized in that the cross-section of the coil element is circular.
- 4. (Currently Amended): The spring-buffer as recited in claim 2, wherein a further characterized in that the cross-section of the coil element is rectangular arcuate.
- 5. (Currently Amended): The spring-buffer as recited in claim 2, wherein a further characterized in that the transverse coil pitch of the coil element is constant.

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- 6. (Currently Amended): The spring buffer as recited in claim 1, where in wherein the vertically moving element is an elevator car.
- 7. (Currently Amended): The spring buffer as recited in claim 1, where-in wherein the vertically moving element is a counterweight.
- 8. (New): The buffer as recited in claim 1, wherein a thickness the innermost coil radially varies so as to create a substantially flat contact surface.
- 9. (New): The buffer as recited in claim 1, wherein a thickness the outermost coil radially varies so as to create a substantially flat contact surface.
- 10. (New): The buffer as recited in claim 9, wherein a thickness the innermost coil radially varies so as to create a substantially flat contact surface.